

**CLAIMS****WHAT IS CLAIMED:**

1. A method of wireless communication, comprising:

generating a code mask for coding transmissions over a traffic channel based on at least one frequency differentiator indicative of a frequency range, at least one band class differentiator indicative of a band class, and at least one traffic channel differentiator indicative of a traffic channel.

2. The method of claim 1, wherein the traffic channel differentiator comprises a Walsh code assigned to the traffic channel.

3. The method of claim 1, wherein the frequency differentiator comprises a channel number.

4. The method of claim 1, wherein the band class differentiator comprises a band class number.

5. The method of claim 1, wherein generating the code mask comprises combining the frequency differentiator, the band class differentiator, and the traffic channel differentiator.

6. The method of claim 5, wherein combining the frequency differentiator, the band class differentiator, and the traffic channel differentiator comprises concatenating the frequency differentiator, the band class differentiator, and the traffic channel differentiator in a desired order.

7. The method of claim 6, wherein concatenating the frequency differentiator, the band class differentiator, and the traffic channel differentiator comprises arranging one or more strings of bits in a discontinuous manner.

5 8. The method of claim 5, wherein combining the frequency differentiator, the band class differentiator, and the traffic channel differentiator comprises at least one of multiplexing, encoding, permutating, and functionally manipulating at least a portion of at least one of the frequency differentiator, the band class differentiator, and the traffic channel differentiator.

10 9. The method of claim 1, further comprising transmitting a message indicative of the generated code mask from a base station assigning the traffic channel.

10. The method of claim 9, further comprising sending the generated code mask to a mobile unit.

15 11. The method of claim 1, further comprising delaying re-assignment of the traffic channel indicator until substantially after a predetermined time.

20 12. The method of claim 11, wherein delaying re-assignment of the traffic channel indicator until substantially after the predetermined time comprises delaying re-assignment of the traffic channel indicator until substantially after a guard timer expires.

13. A method, comprising:

25 receiving an indication that an inter-frequency handoff from a first frequency range to a second frequency range is to be initiated;

generating, in response to receiving the indication, a code mask for coding transmissions over a traffic channel based on at least one frequency differentiator indicative of the second frequency range, at least one band class differentiator indicative of a band class, and at least one traffic channel differentiator indicative of a traffic channel;

5 performing the inter-frequency handoff from the first frequency to the second frequency;  
and  
transmitting the code mask.

10 14. The method of claim 13, wherein transmitting the code mask comprises transmitting the code mask substantially after performing the inter-frequency handoff from the first frequency range to the second frequency range.

15 15. The method of claim 13, wherein transmitting the code mask comprises transmitting the code mask during the inter-frequency handoff from the first frequency range to the second frequency range.

16. The method of claim 13, wherein receiving the indication comprises receiving an indication transmitted from a mobile unit to a base station.

20 17. The method of claim 13, wherein the traffic channel differentiator comprises a Walsh code assigned to the traffic channel, the frequency differentiator comprises a channel number indicative of the second frequency range, and the band class differentiator comprises a band class number.

18. The method of claim 13, wherein generating the code mask comprises combining the frequency differentiator, the band class differentiator, and the traffic channel differentiator.

19. The method of claim 13, further comprising assigning the traffic channel indicator to a new wireless communication link substantially after a predetermined time.

20. A method of wireless communication, comprising:

receiving a code mask for coding transmissions over a traffic channel based on at least one frequency differentiator indicative of a frequency range, at least one band class differentiator indicative of a band class, and at least one traffic channel differentiator indicative of a traffic channel; and

transmitting over the traffic channel using the received code mask.

21. The method of claim 20, wherein receiving the code mask comprises receiving the code mask substantially during or after an inter-frequency handoff.

22. The method of claim 21, wherein receiving the code mask comprises receiving a code mask that is different than a previous code mask used substantially before or during the inter-frequency handoff.